Fireground factors offer a standard list of basic items Command must consider in the evaluation of tactical
situations. This list should provide Command with a "checklist" of the basic items that are involved in size-up, decision making, initiating action, review and revision on the fireground.

The effective Command Officer can only deal with a limited number of factors, of any kind, on the fireground. Within the framework of that limitation, the identification of critical factors is extremely important. All the factors are not critical in any one tactical situation. Command must identify the critical fireground factors that are significant in each tactical situation -- the list of factors offers a framework for that process.

Many times we begin operations before adequately considering the critical fireground factors. Size-up is a conscious process involving the very rapid but deliberate consideration of the critical factors and the development of a strategy and *rational* plan of attack based on those conditions. Attack is many times an instinctive action-oriented process that involves taking the shortest and quickest route directly to the fire.

Action feels good in fireground situations while thinking delays action. Beware of non-thinking attack situations and non-thinking attackers!

Fireground factors represent an array of items that are dynamic during the entire fireground process. The relative importance of each factor necessarily changes throughout that time frame. Command must continually deal with these changes and base decisions on factor information that is timely and current.

Beware of developing an initial plan of attack and sticking to that same initial plan throughout the fire, even though conditions continue to change. Effective fire operations require attack plan revisions that continually reconsider fireground factors based upon information feedback.

In critical fire situations, Command may develop an initial plan and initiate an attack based on an incomplete evaluation of fireground factors. In such cases, efforts must continue throughout the operation, to *improve* the information on which those decisions are based. Command will seldom operate with complete information during initial operations.

The effective management of each fireground factor requires Command to apply a somewhat different form of information management (visual, recon, preplan) to each factor. This is particularly true between the major categories of factors. Command must deal with each factor in the most effective manner.

Most tactical situations represent a complex problem with regard to how Command deals with fireground factor information. There are factors that can be determined from a command position on the outside of the structure and other factors that can only be determined from other operating positions, both outside and inside the structure. Fireground intelligence available to Command is developed utilizing an overlapping variety of information management factors and forms. These forms of information management revolve around the three basic information factors:

1. *Visual Factors* - These factors include those obvious to visual observation and those absorbed subconsciously. This visual information is categorized as the type that can normally be gained by actually looking at a tactical situation from the outside. This form of intelligence involves the perceptive capability of Command.
2. *Reconnaissance Factors* - These factors include information that is not visually available to Command from a position on the outside of a tactical situation and must be gained by actually sending someone to check-out, go-see, look-up, research, advise, call, go-find, etc. This generally involves Command making a specific assignment and then receiving an information-oriented report.

3. *Preplanning and Familiarity Factors* - These factors include the intelligence that is gained from formal pre-fire planning, general informal familiarization activities (i.e., bldg. drawings, hazardous materials, etc.). Such intelligence increases the information initially available to Command from the OUTSIDE of a tactical situation. This information provides Command with intelligence that would otherwise have to come from a Reconnaissance report or might not be available.

The following are fireground factors, which should be evaluated by Command as they pertain to each tactical situation. They can be obtained by using the above information management factors.

BUILDING

Size
Roof type (Bow string, bar joist, etc.), and condition
Interior arrangement/access (stairs, halls, elevators)
Construction type
Age
Condition faults/weaknesses
Value
Compartmentation/separation

Vertical-horizontal openings, shafts, channels
Outside openings - doors and windows/degree of security
Utility characteristics (hazards/controls)
Concealed spaces/attic characteristics
Exterior access
Effect the fire has had on the structure (at this point)
Time projection on continuing fire effect on building
Fire protection features

FIRE

Size
Extent (% of structure involved)
Location
Stage (inception --- flashover)
Direction of travel (most dangerous)
Time of involvement
Type and amount of material involved - structure/interior finish/contents/everything
Type and amount of material left to burn
Product of combustion liberation

OCCUPANCY

Specific occupancy
Type-group (business, mercantile, public, assembly, institutional, residential, hazardous, industrial, storage, school)
Value characteristics associated with occupancy
Fire load (size, nature)
Status (open, closed, occupied, vacant, abandoned, under construction)
Occupancy associated characteristics/hazards
Type of contents (based on occupancy)
Time--as it affects occupancy use
Loss Control profile/susceptibility of contents to damage/specific loss control needs (computers, business records)

LIFE HAZARD

Number of occupants
Location of occupants (in relation to the fire)
Condition of occupants (by virtue of fire exposure)
Incapacity's of occupants
Commitment required for search and rescue (personnel, equipment, and Command)
Fire control required for search and rescue
Need for EMS
Time estimate of fire effect on victims
Exposure of spectators/control of spectators
Hazards to fire personnel access rescue forces have to victims
Characteristics of escape routes/avenues of escape (type, safety, fire conditions, etc.)

ARRANGEMENT

Features that contribute to fire spread
Access, arrangement, and distance of external exposure
Combustibility of exposures
Access, arrangement, and nature of internal exposures
Severity and urgency of exposures (fire effect)
Value of exposures
Most dangerous direction - avenue of spread
Time estimate of fire effect on exposures (internal and external)
Obstructions to operations
Capability/limitations on apparatus movement and use

RESOURCES

Personnel and equipment on scene
Personnel and equipment responding
Personnel and equipment available in reserve or in Staging
Estimate of response time of additional resources
Condition of personnel
Capability and willingness of personnel
Capability of command personnel
Availability of hydrants / water supply
Supplemental water sources
Adequacy of water supply

Built-in private fire protection (sprinkler, standpipe, alarms)
Outside agency resource and response time

OTHER FACTORS/CONDITIONS

Time of day/night
Day of week
Season
Special hazards by virtue of holidays and special events
Weather (wind, rain, heat, cold, humid, visibility)
Traffic conditions
Social conditions (strike, riot, mob, rock festival)
Involvement of utilities (gas, electric)